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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,244	03/20/2001	Teruji Yamakawa	0941.65336	1734
24978	7590	09/21/2004	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/813,244	Applicant(s) YAMAKAWA ET AL.	
	Examiner Gautam R. Patel	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This is in response to amendment filed on 1-22-04.
2. claims 1-7 remain for examination.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, and 5-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yokota et al., US. patent 5,646,921 (hereafter Yokota).

As to claim 1, Yokota discloses the invention as claimed [see Figs. 1-6, especially 2 and 6] including a detecting step and a controlling step, comprising the steps of:

a detecting step which detects a state within a memory which temporarily stores write data to be written on the recording medium and/or read data read from the recording medium [col. 11, lines 28-63 and col. 15, lines 36-61]; and

a controlling step which switches and controls a rotational speed of the recording medium based on the state detected by the detecting step, depending on an area which is accessed of a plurality of areas of the recording medium dividing the recording medium in the radial direction thereof [col. 11, lines 28-63 and col. 15, lines 36-61].

4. As to claim 2, Yokota discloses:

said controlling step switches the rotational speed when a capacity of the memory occupied by the read data exceeds a first capacity during a read access, and

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switches the rotational speed when a vacant capacity of the memory exceeds a second capacity during a write access [col. 15, line 36 to col. 16, line 25 and col. 16, lines 34-62]

5. As to claim 5, Yokota discloses:

said controlling step switches the rotational speed after a predetermined time elapses from a time when conditions for switching the rotational speed are satisfied [col. 15, lines 36-61].

NOTE: When capacity is checked and, the threshold is compared for that capacity, inherently a predetermined time elapses from a time when condition for switching speed are satisfied.

6. As to claim 6, it is rejected for the same reasons set forth in the rejection of claim 5, supra.

7. As to claim 7, it is rejected for the same reasons set forth in the rejection of claim 5, supra.

Claim Rejections - 35 U.S.C. § 103

8. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 3-4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yokota as applied to claims 1-2 and 5-7 above and in view of Syobatake et al., US. patent 5,083,269 (hereafter Syobatake).

As to claim 3, Yokota discloses all of the above elements, including a detecting step and a controlling step. Yokota does not specifically disclose that speed is switched by giving priority to an access which uses a speed in use..

However, it is well known in the art that generally the priority is given to task at hand in this case speed in use because switching back and forth unnecessarily causes delay in the processing. Also Syobatake clearly discloses that it well known in the art of buffer management to give priority to task at hand [i.e. give priority to rotational speed in use] [abstract and col. 9, line 59 to col. 10, line 4]. Both Yokota and Syobatake are interested in improving data storage scheme and provide maximum efficiency in storage and movement of the data.

One of ordinary skill in the art at the time of invention would have realized that it is possible to provide a buffer device capable of dealing with multiple priority levels and efficient use of memory capacity utilization is a desired feature to have in a memory or a buffer management scheme. Therefore, it would have been obvious to have used a priority selection type buffer in the system of Yokota as taught by Syobatake because one would be motivated to handle priority levels in higher efficiency manner, especially in a high speed buffer implementation and capacity of entire buffer structure will be utilized at a high efficiency [col. 9, line 60 to col. 10, line 4].

10. As to claim 4, it is rejected for the same reasons set forth in the rejection of claim 3, supra.

Yokota and Syobatake were cited as prior art references in previous action.

11. Applicant's arguments filed on 1-22-04 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "Yokota proposes a method of reproducing information from a disc type recording medium, which is recorded using a constant linear velocity (CLV), as clearly described in the abstract, column 1, lines 8-11, column 2, lines 9-13, and claim 1, for example. Yokota does not [original emphasis] disclose or teach reproducing information from a recording medium which is recorded using a CAV disc system. Although in column 2, lines 53-55 Yokota refers to "CAV", this merely refers to a CAV type reproducing operation that operates with a CLV type recording medium, and not to a CAV system recording medium, as recited in claim1." [page 5, para. 2; REMARKS].

FIRST : The Examiner agrees that quotes does indicate what it seems at the first glance. However the Examiner thinks the Applicants are taking these quotes out of context. For example abstract [by Yokota] also clearly discloses: "The method of reproducing the recording medium by the reproducing apparatus is provided with the steps of: [ABSTRACT, lines 8-9; Yokota] ... rotating the recording medium by a constant angular velocity [i.e. CAV] in each of the set virtual zones by the set number of rotation [ABSTRACT, lines 18-19; Yokota].

SECOND: This abstract clearly shows that the system of Yokota is good for **BOTH** the CLV and CAV system of operation. For simplicity and so as not repeat all over the place Yokota explains his system in terms of CLV.

THIRD: All over the specification, Yokota repeats that his system is good for BOTH CLV and CAV. [e.g. see fig. 2, which is **completely based on CAV**]. Also see col. 15, lines 36-57; col. 17, lines 40-42; col. 11, lines 50-56].

FOURTH: As a matter of fact the col. 2, cited by the Applicants also further down discloses "In this manner, since the CAV type reproduction is performed in **each** of the virtual **zones**, the access time can be made short according to first method of the present invention.

B) That: "In contrast, the present invention is directed to a rotation control method for controlling rotation of a CAV system recording medium which has a plurality of zones divided in radial direction thereof." [page 5, para. 3; REMARKS].

FIRST : See paragraph 11 section A) above.

SECOND: Plurality of zones has not been claimed. And even if they were claimed, Yokota clearly discloses them [see col. 2, line 66 to col. 3, line 2].

THIRD: As a matter of fact Yokota also shows advantages of the CAV system in the same above mentioned lines.

C) That: "Since claims 3 and 4 ultimately depend upon claim 1, they necessarily include all of the features of their associated independent claim ...".

That being the case, please see paragraph 11 section A) above for claim 3-4 etc.

12. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

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The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.

Gautam R. Patel
Primary Examiner
Group Art Unit 2655

A handwritten signature in black ink, appearing to read 'Gautam R. Patel', with a long horizontal stroke extending to the right.

GAUTAM R. PATEL
PRIMARY EXAMINER

September 18, 2004